

CLAIMS

What is claimed is:

1. A method comprising:
uniting navigation hierarchies from different application sources; and
providing a unified navigation area based on the united navigation hierarchy.

2. The method of claim 1, wherein uniting the navigation hierarchies comprises
supplying a navigation service with a navigation object model that provides, to a presentation
layer, a homogeneous view of navigation information from the different application sources.

3. The method of claim 2, wherein uniting the navigation hierarchies further
comprises:
accepting connectors for the different application sources; and
receiving the navigation information from the different application sources through the
connectors according to the navigation object model.

4. The method of claim 3, wherein accepting connectors for the different
application sources comprises receiving a registration request from a connector for a given
application, receipt of the registration request resulting in the navigation service having an
identifier for the given connector, and said receiving the navigation information comprises
receiving navigation nodes, from the given connector, as defined by the navigation object
model, the received navigation nodes including the connector identifier.

5. The method of claim 4, further comprising selecting a connector to contact
based on a connector identifier from a navigation node in the united navigation hierarchy.

6. The method of claim 2, wherein providing the unified navigation area comprises
displaying a navigation window in a portal presentation, the navigation window including
navigation links to resources of the different application sources, the navigation links being
organized according to the united navigation hierarchy.

7. The method of claim 2, wherein the united navigation hierarchy comprises navigation nodes defined by the navigation object model, the method further comprising:
receiving a navigation action; and
changing at least one of the navigation nodes in accordance with the received navigation action.

8. The method of claim 2, wherein uniting the navigation hierarchies further comprises merging at least two navigation objects from the different application sources based on a merge identifier.

9. The method of claim 8, wherein the united navigation hierarchy comprises a graph of linking relationships among navigation objects.

10. The method of claim 2, wherein uniting the navigation hierarchies further comprises dynamically loading the united navigation hierarchy.

11. The method of claim 2, further comprising enabling setting of a node as a new root of the united navigation hierarchy for display.

12. A portal system having a presentation level and a data level, the portal system comprising:

a navigation service module including a navigation object model that provides a homogeneous view of navigation information from different application sources to the presentation level; and

navigation connectors that operate with the different application sources to provide the navigation information from the data level to the navigation service module.

13. The portal system of claim 12, wherein the navigation connectors include connector identifiers that are included in navigation nodes generated by the navigation connectors to provide the navigation information.

14. The portal system of claim 12, wherein the navigation connectors generate navigation nodes according to the navigation object model to provide the navigation information, the navigation nodes including at least one merge identifier that indicates similar content in two navigation nodes from different applications and that results in a merger of the two navigation nodes.

15. The portal system of claim 12, wherein the navigation object model defines navigation nodes used to represent the navigation information from the different application sources, the navigation nodes including a linking relationship to other nodes that are not in a parent child relationship in the homogeneous view of the navigation information.

16. The portal system of claim 12, wherein the navigation service module is configured to read data from the different application sources using the navigation connectors but not to write data to the different application sources using the navigation connectors.

17. The portal system of claim 12, wherein the navigation service module dynamically loads a united navigation hierarchy when providing the homogeneous view of the navigation information.

18. The portal system of claim 17, wherein a role editor allows setting a node as a new root of the united navigation hierarchy for display for users that belong to a role.

19. A system comprising:
means for uniting navigation hierarchies from different application sources; and
means for providing a unified navigation area based on the united navigation hierarchy.

20. The system of claim 19, wherein the means for uniting the navigation hierarchies comprises a navigation object model that includes definitions of a connector interface to the different application sources and a navigation data interface to a presentation layer.

21. The system of claim 20, wherein the means for uniting the navigation hierarchies further comprises INavigationService means for abstracting navigation operations, the connector interface comprises INavigationConnector means for plugging an application into the INavigationService means, and the navigation data interface comprises INavigationNode means for accessing navigation information from the different application sources.

22. An article comprising a machine-readable medium storing instructions operable to cause one or more machines to perform operations comprising:
uniting navigation hierarchies from different application sources; and
providing a unified navigation area based on the united navigation hierarchy.

23. The article of claim 22, wherein uniting the navigation hierarchies comprises supplying a navigation service with a navigation object model that provides a homogeneous view of navigation information from the different application sources to a presentation layer.

24. The article of claim 23, wherein uniting the navigation hierarchies further comprises:
accepting connectors for the different application sources; and
receiving the navigation information from the different application sources through the connectors according to the navigation object model.

25. The article of claim 24, wherein said accepting the connectors comprises receiving a registration request from a connector for a given application, receipt of the registration request resulting in the navigation service having an identifier for the given connector, and said receiving the navigation information comprises receiving navigation nodes, from the given connector, as defined by the navigation object model, the received navigation nodes including the connector identifier.

26. The article of claim 25, wherein the operations further comprise selecting a connector to contact based on a connector identifier from a navigation node in the united navigation hierarchy.

27. The article of claim 23, wherein providing the unified navigation area comprises displaying a navigation window in a portal presentation, the navigation window including navigation links to resources of the different application sources, the navigation links being organized according to the united navigation hierarchy.

28. The article of claim 23, wherein the united navigation hierarchy comprises navigation nodes defined by the navigation object model, the operations further comprising:
receiving a navigation action; and
changing at least one of the navigation nodes in accordance with the received navigation action.

29. The article of claim 23, wherein uniting the navigation hierarchies further comprises merging at least two navigation objects from the different application sources based on a merge identifier.

30. The article of claim 29, wherein the united navigation hierarchy comprises a graph of linking relationships among navigation objects.

31. The article of claim 23, wherein uniting the navigation hierarchies further comprises dynamically loading the united navigation hierarchy.

32. The article of claim 23, wherein the operations further comprise enabling setting of a node as a new root of the united navigation hierarchy for display.